

**WHAT IS CLAIMED IS:**

**1. A syringe comprising:**

(a) a hollow, axially elongated barrel;

(b) an adapter carried by said barrel adjacent a distal end thereof and removable therefrom in response to rotation relative to said barrel, the adapter carrying a needle and providing fluid communication with the interior of said hollow barrel;

(c) a plunger axially movable in said barrel between first and second positions relative to said barrel;

(d) adapter engagement structure disposed at the distal end of the plunger and engageable with a mating connection engagement structure on the adapter, said structures having respective drive and connective engagement surfaces, said drive surfaces being engageable with one another when said plunger lies in said first position relative to said barrel and jointly movable to enable rotation of the adapter relative to the barrel in response to relative rotation of the plunger and barrel to cause the adapter to part from the distal end of the barrel, said connective surfaces being engageable with one another to connect the plunger and adapter one with the other and enable said adapter, when parted from the end of the barrel in response to joint rotation of said adapter and said plunger relative to said barrel, to be withdrawn with the needle into the interior of the barrel in response to joint axial movement of said plunger and said adapter in a direction away from the distal end of the barrel; and

(e) a cap carried by said barrel and movable between a position closing said distal end of said barrel and a position avoiding interference with the distal end of the barrel.

2. A syringe according to Claim 1 wherein said barrel is cylindrical and said cap in said interference avoiding position lies substantially laterally outwardly of cylindrical confines of said barrel.

3. A syringe according to Claim 1 wherein said cap is pivotally carried by said barrel for movement between said positions closing said barrel and avoiding interference with said distal end of the barrel.

4. A syringe according to Claim 1 wherein said cap is secured to said barrel by a flexible hinge.

5. A syringe according to Claim 1 including structure cooperable between said cap and said barrel for retaining said cap in said interference avoiding position.

6. A syringe according to Claim 1 wherein said cap is secured by said barrel after said adapter and needle carried thereby have been withdrawn into the interior of the barrel.

7. A syringe according to Claim 1 wherein said adapter has a projection and said needle has a hub for releasable mounting on said projection, said cap being secured to said barrel to overlies said distal end of said barrel prior to mounting said hub on said projection.

8. A syringe according to Claim 1 wherein said cap has an open cylindrical end for receiving the distal end of said barrel and an opposite closed end.

9. A syringe according to Claim 8 wherein said outer closed end has an outer flat surface having a lateral extent of about a width of said barrel.

10. A syringe according to Claim 9 wherein said flat surface has a feathered edge for creating a suction upon application of said closed end and said feathered edge against an adjoining flat surface.

11. A syringe according to Claim 9 wherein said flat surface has adhesive applied thereto for releasably and adhesively securing said cap to an adjoining flat surface.

12. A syringe according to Claim 11 including a releasable membrane overlying said adhesive and removable therefrom to expose said adhesive.